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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,149

05/18/2006

Alan M. Finn

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EXAMINER

COLON SANTANA, EDUARDO

ART UNIT

PAPER NUMBER

2837

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,149	Applicant(s) FINN ET AL.	
	Examiner Eduardo Colon-Santana	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/05/2007</u> . | 6) <input checked="" type="checkbox"/> Other: <u>DETAILED ACTION</u> . |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 3/05/2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

2. Claims 7-10 are objected to because of the following minor informalities: The claims are drawn to a method, but depends from article claim 1. It appears that the claims should be dependent from independent claim 6. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable and obvious over Silberhorn et al. U.S. Patent No. 6,612,403 in view of Castelli et al. U.S. Patent Application No. 2001/0022899 A1.

Referring to claims 1, 6 and 10, Silberhorn et al. discloses a method and apparatus for generating elevator position information (see all figures and respective portions of the specification). Silberhorn further discloses at least one active array element (4) having at least one light emitting element (LED's, halogen lamps) for transmitting an electric charge having identification positioned at a known location; at least one camera (3) for acquiring an image of the active array (see figure 1). Furthermore, Silberhorn depicts from figure 1, a means (6) for receiving the electric charge from the image; a means (7 or 10) for processing the image to determined the position of the active array with respect to the moveable platform and a means (9) for combining the received electric charge and the determined position (8) to calculate a position of the moveable platform (see Col. 2, lines 36-57; Col. 3, lines 27-54). However, Silberhorn et al. does not explicitly describe that the electric charge is based on binary code and is dynamically configured. Nonetheless, Castelli et al. discloses the use of a CCD array as a position determining sensor (352) in which the CCD array is operated in a binary mode, wherein an electric charge threshold is set for the CCD array and if a certain amount of light is imaged on a particular CCD array element, a charge larger would generate a digital value 1

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and if less light than the threshold is imaged a digital value 0 is assigned making the system dynamic (see Figures 3, 4 and page 5, par. 0056). Since Silberhorn and Castelli are in the same field of endeavor regarding determining position, the purpose disclosed by Castelli would have been recognized in the pertinent art of Silberhorn. It would have been obvious to one of ordinary skill in the art at the time of the invention to use an active array transmitting a binary code as an alternative orthography of an electric charge as taught by Castelli within the teaching of Silberhorn for the purpose/advantages that by transmitting a binary code as an electric charge, an electric charge threshold can be set to determine a digital value 1 or 0. As a result, transition from a digital 1 to a digital 0 or from a digital 0 to a digital 1 would dynamically denote the position of an edge of a position-determining mark without the use of a passive reflector (i.e. printed coded strip), having a more efficient system for various environmental conditions.

As to claim 2, Silberhorn et al. discloses at least one camera (3) and at least one active array element (4) affixed to a moveable platform (C). However, does not explicitly describe that the active array element is affixed to a doorframe. It would have been obvious to one having ordinary skill in the art at the time the invention was made to affix the active array element on another location such as a doorframe, since it has been held that rearranging parts of an invention involves only routine skill in the art. See *In re Japikse*, 86 USPQ 70. Additionally, the claim would have been obvious because

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the design incentives or the market forces would have provided a reason to make an adaptation to move the active array element, and the invention resulted from application of the prior knowledge in a predictable manner.

Referring to claims 3 and 9, Silberhorn et al. discloses that the moveable platform (C) is an elevator car (see Col. 2, line 50).

As to claims 4 and 7, Silberhorn et al. discloses that the light emitting elements can be Light Emitting Diode (LED) or halogen lamps (see Col. 2, line 44). However, the use of infrared (IR) and ultraviolet (UV) light emitter is obvious as they are readily available to one of ordinary skill in the art.

Referring to claims 5 and 8, Silberhorn et al. discloses the use of a database (11) in which position information is stored (see Abstract and Col. 3, lines 40-60).

Conclusion

4. The prior art made of record in form 892 and not specifically relied upon is considered pertinent to applicant's disclosure to further show the state of the art.

The related prior art discloses various elevator system in which position is sensed using coded information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Colon-Santana whose telephone number is (571)272-2060. The examiner can normally be reached on Monday thru Friday 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on (571) 272-2800 X.37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eduardo Colon-Santana/
Patent Examiner
Art Unit 2837

/ECS/
February 9, 2009

/T C Patel/
Supervisory Patent Examiner, Art Unit 2839